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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/719,736

11/21/2003

Steven R. Sedlmayr

AUO1016

3544

7590

12/20/2005

Law Office of Roxana H. Yang  
P.O. Box 3986  
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EXAMINER

FINEMAN, LEE A

ART UNIT

PAPER NUMBER

2872

DATE MAILED: 12/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/719,736

Applicant(s)

SEDLMAYR, STEVEN R.

Examiner

Lee Fineman

Art Unit

2872

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 11 October 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 157 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 157 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

### DETAILED ACTION

This Office Action is in response to an amendment filed 11 October 2005 in which claim 157 was amended. Claim 157 is pending.

#### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claim 157 is rejected under 35 U.S.C. 103(a) as being unpatentable over Karasawa et al., US 5,200,843 in view of Konno et al., US 4,497,015 and Dudley, US 4,159,163.

Karasawa et al. disclose in fig. 13 a method of producing a modulated beam of visible light (from 49), comprising: [a] producing a beam of electromagnetic energy (from 1 and 44); [b] separating the beam of electromagnetic energy into a plurality separate electromagnetic energy beams (by 45) without discarding half of the beam of electromagnetic energy (the beam consists only of a single polarization, therefore nothing is discarded when it is being separated by 45), each of the electromagnetic energy beams having a predetermined orientation of electromagnetic wave field vector (P or S); [c] passing a plurality of portions of each separated electromagnetic energy beam through a respective one of a plurality of means (8R, 8G, 8B) for changing the orientation of the electromagnetic wave field vector in a single direction (fig. 13) whereby the orientation of electromagnetic wave field vector of the plurality of portions of the electromagnetic energy beams is altered as same passes through the respective one of the

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plurality of means for changing the orientation of electromagnetic wave field vector (column 1, lines 31-33); [d] combining (with 47) the more than two separated electromagnetic energy beams without previously subcombining any plurality of the separated electromagnetic energy beams; [e] locating a projection means (49) such that the distance of the light path between the projection means and each of the plurality of means (8R, 8G, 8B) for changing the orientation of the electromagnetic wave field vector is substantially equal (fig. 13); [f] passing at least a portion of the single collinear beam of electromagnetic beams of electromagnetic energy to the projection means (49); [g] locating a surface means (13); and [h] passing at least a portion of the single collinear beam of electromagnetic energy from the projection means to the surface means (fig. 13). Karasawa et al. disclose the claimed invention except for the beam having a substantially uniform flux intensity substantially across the entire beam and the surface means being up to approximately 10 feet of the projection means. Konno et al. disclose a light illumination device (fig. 5) that produces a beam (at M) that has a substantially uniform flux intensity substantially across the beam of light (column 5, lines 43-52). It would have been obvious to one of ordinary skill in the art at the time the invention was made to replace the light source of Karasawa et al. with that of Konno et al. to have a more uniform intensity light beam and provide a more consistent image. Further, it is very well known that there are projectors which are portable for use in rooms and offices up to a distance of approximately 10 feet from the projection means. For example, Dudley teaches in column 2, lines 31-32 that a common projection-to-screen distance is 10 feet. It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the surface means be up to approximately 10 feet from the projection means in order to provide projection capability based on the size of the room.

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Finally, it is noted that the preamble fails to structurally limit the body of claim. Karasawa et al. in view of Konno et al. meets all of the structural limitations required by the claim in support thereof. As such, Karasawa et al. in view of Konno et al. must support the brightness of the image increasing as the distance from the projector lens to a screen increases up to a distance of approximately 10 feet in the same way as the structure of the claim.

### ***Response to Arguments***

3. Applicant's arguments filed 11 October 2005 have been fully considered but they are not persuasive.

Applicant argues that because Karasawa et al. discloses a conventional projection type display system, 50% of the light transmitted from light source 1 transmitted through polarizer 44 will be absorbed and lost. Therefore, the newly amended claims are now in condition for allowance. The examiner respectfully disagrees and would like to point out there is no specificity as to when/where the electromagnetic beam is produced in step [a]. It is the examiner's position that the beam is produced from both 1 and 44 and therefore does not discard half of the beam of electromagnetic energy when it is further separated in step [b] (i.e., the beam already consists of only a single polarization, therefore nothing is discarded when it is being separated by 45).

*Conclusion*

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lee Fineman whose telephone number is (571) 272-2313. The examiner can normally be reached on Monday - Friday 7:30 - 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew Dunn can be reached on (571) 272-2312. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



LAF  
December 13, 2005

  
MARK A. ROBINSON  
PRIMARY EXAMINER